

0570
0103

OPE #2

Serial Number: 10/013,056

CRF Processing Date: 1/9/2002
Edited by: A
Verified by: A (STIC stat) Changed a file from non-ASCII to ASCII **ENTERED** Changed the margins in cases where the sequence text was "wrapped" down to the next line. Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other _____ Added the mandatory heading and subheadings for "Current Application Data". Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: _____ Deleted extra, invalid, headings used by an applicant, specifically: Deleted non-ASCII "garbage" at the beginning/end of files; secretary initials/username at end of file; page numbers throughout text; other invalid text, such as _____ Inserted mandatory headings, specifically: _____ Corrected an obvious error in the response, specifically: Edited identifiers where upper case is used but lower case is required, or vice versa. Corrected an error in the Number of Sequences field, specifically: A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____ Other:

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/013,056

DATE: 01/09/2002
 TIME: 08:24:10

Input Set : A:\PTO.AMC.txt
 Output Set: N:\CRF3\01092002\J013056.raw

5 <110> APPLICANT: Ligensa, Tanja
 7 Schumacher, Ralf
 9 Weidner, Michael
 13 <120> TITLE OF INVENTION: IGF-1 Receptor Interacting Proteins
 17 <130> FILE REFERENCE: 09/453,195
 C--> 21 <140> CURRENT APPLICATION NUMBER: US/10/013,056
 C--> 23 <141> CURRENT FILING DATE: 2001-10-30
 27 <150> PRIOR APPLICATION NUMBER: EPO 98122992.5
 29 <151> PRIOR FILING DATE: 1998-12-03
 33 <160> NUMBER OF SEQ ID NOS: 10
 37 <170> SOFTWARE: PatentIn Ver. 2.1
 41 <210> SEQ ID NO: 1
 43 <211> LENGTH: 1707
 45 <212> TYPE: DNA
 47 <213> ORGANISM: Homo sapiens
 51 <220> FEATURE:
 53 <223> OTHER INFORMATION: n at position 186, 187, 203, and 205 is a, t, g, or c.
 57 <400> SEQUENCE: 1
 59 gaaacccaca ggaggcaacc acactagttt agatcttctg gtgacccac ttctcgctgc 60
 61 tcatgccgt gggactgggg cggcgaaaaa aggccccc tctagtgaa aatgaggagg 120
 63 ctgagccagg ccgtggaggg ctggcgtgg gggagccagg gcctctggc ggaggtgggt 180
 64 cgggnnnccc ccaaatggc ttncncccc ctcctccagc cctgcggccc cgcctcggt 240
 65 tccacaccca gctggccat ggcagtccca ctggccgtat cgagggtttt accaacgtca 300
 66 aggagctgtt tggcaagatc gccgaggcc tccgcctgcc aactgcggag gtgatgttct 360
 67 gcaccctgaa caccacaaa gtggacatgg acaagcttctt gggggccag atcgggctgg 420
 68 aggacttcat ctgcgtccac gtgaaggggc agcgcacatgg ggtggagggtt ttcaagtcgg 480
 69 agggatgcact cgggctcacc atcacggaca acggggctgg ctacgccttc atcaagcgca 540
 70 tcaaggaggg cagcgtgatc gaccacatcc acctcatcgt cgtggccgac atgatcgagg 600
 71 ccattaacgg gcagagccgt ctggcgtgcc ggcactacgt ggtggccccc ctgcgtcaagg 660
 72 agctgcccccg aggccgtacc ttacgcgtt agctcacggc gcctcgcaag gccttcgaca 720
 73 tgatcagcca gcgttcagcg ggtggccgcc ctggctctgg cccacaactg ggcactggcc 780
 74 gagggaccct gcggctccga tcccggggcc cggccacggg ggaggatctg ccctctgcct 840
 75 ttgaagagaa ggcatttgat aagggtggatg acctgcgtt gaggatcatg ggtatcaggg 900
 76 acacggagct ggcagccacc atgggtggagc tggaaagga caaaaggaac ccggatgagc 960
 77 tggccgaggc cctggacgaa cggctgggtt actttgcctt ccctgcacgg ttcgttctt 1020
 78 acgtctgggg cgcatttggg gacgcacagg tcggccgtt ctggactgc cccggaccc 1080
 79 tgcgtatgtt acccgccgc aacctgggtt gggccccccag cagggacact gacgtcagga 1140
 80 cccgacgcctc cagcgtgac ctatgcgtt acggccacgg cgtatgtt gggaggtggg 1200
 81 gccaggcccc ctgcggcgtt ccactcggtt ccacccctc cctggttccc agtctggccg 1260
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 84 gccaaactgg tccctctgtt tccctggggc cttgggttctt gtttgggggtt catgaccc 1440
 85 ctatgttccat gacgcaggaa atacaggggaa gaggttgc cttcccccac gcaatgcac 1500
 86 taatgcctc accccctctg agaggagccc ctcctgtt gaggatgtt ctcctccagg 1560
 87 tgacacgagt ctgcgtgaa ccccgcaacc tcctcccccac ctccatctc tccttccagg 1620
 88 cccatccctg gcccagagca ggaggggaggg agggacatgt gcggtgggtt ttgtatctg 1680
 89 aatttgcgtt ctgaacata aagaatc 1707

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/013,056

DATE: 01/09/2002
TIME: 08:24:10

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\01092002\J013056.raw

121 <210> SEQ ID NO: 2
123 <211> LENGTH: 333
125 <212> TYPE: PRT
127 <213> ORGANISM: Homo sapiens
131 <220> FEATURE:
133 <223> OTHER INFORMATION: Xaa at position 42, 47, and 48 is any one of the twenty naturally occurring amino acids.
139 <400> SEQUENCE: 2
141 Met Pro Leu Gly Leu Gly Arg Arg Lys Lys Ala Pro Pro Leu Val Glu
143 1 5 10 15
147 Asn Glu Glu Ala Glu Pro Gly Arg Gly Gly Leu Gly Val Gly Glu Pro
149 20 25 30
W-153 Gly Pro Leu Gly Gly Gly Ser Gly Xaa Pro Gln Met Gly Xaa Xaa
155 35 40 45
159 Pro Pro Pro Pro Ala Leu Arg Pro Arg Leu Val Phe His Thr Gln Leu
161 50 55 60
165 Ala His Gly Ser Pro Thr Gly Arg Ile Glu Gly Phe Thr Asn Val Lys
167 65 70 75 80
171 Glu Leu Tyr Gly Lys Ile Ala Glu Ala Phe Arg Leu Pro Thr Ala Glu
173 85 90 95
177 Val Met Phe Cys Thr Leu Asn Thr His Lys Val Asp Met Asp Lys Leu
179 100 105 110
183 Leu Gly Gly Gln Ile Gly Leu Glu Asp Phe Ile Phe Ala His Val Lys
185 115 120 125
189 Gly Gln Arg Lys Glu Val Glu Val Phe Lys Ser Glu Asp Ala Leu Gly
191 130 135 140
195 Leu Thr Ile Thr Asp Asn Gly Ala Gly Tyr Ala Phe Ile Lys Arg Ile
197 145 150 155 160
201 Lys Glu Gly Ser Val Ile Asp His Ile His Leu Ile Ser Val Gly Asp
203 165 170 175
207 Met Ile Glu Ala Ile Asn Gly Gln Ser Leu Leu Gly Cys Arg His Tyr
209 180 185 190
213 Glu Val Ala Arg Leu Leu Lys Glu Leu Pro Arg Gly Arg Thr Phe Thr
215 195 200 205
219 Leu Lys Leu Thr Glu Pro Arg Lys Ala Phe Asp Met Ile Ser Gln Arg
221 210 215 220
225 Ser Ala Gly Gly Arg Pro Gly Ser Gly Pro Gln Leu Gly Thr Gly Arg
227 225 230 235 240
231 Gly Thr Leu Arg Leu Arg Ser Arg Gly Pro Ala Thr Val Glu Asp Leu
233 245 250 255
237 Pro Ser Ala Phe Glu Glu Lys Ala Ile Glu Lys Val Asp Asp Leu Leu
239 260 265 270
243 Glu Ser Tyr Met Gly Ile Arg Asp Thr Glu Leu Ala Ala Thr Met Val
245 275 280 285
249 Glu Leu Gly Lys Asp Lys Arg Asn Pro Asp Glu Leu Ala Glu Ala Leu
251 290 295 300
255 Asp Glu Arg Leu Gly Asp Phe Ala Phe Pro Asp Glu Phe Val Phe Asp
257 305 310 315 320

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/013,056

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Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\01092002\J013056.raw

261 Val Trp Gly Ala Ile Gly Asp Ala Lys Val Gly Arg Tyr
263 325 330
269 <210> SEQ ID NO: 3
271 <211> LENGTH: 380
273 <212> TYPE: DNA
275 <213> ORGANISM: Homo sapiens
279 <220> FEATURE:
281 <223> OTHER INFORMATION: n at position 369 is a, t, g, or c.
285 <400> SEQUENCE: 3
287 gcccggaaag gagaaggggc taaaacctgg agagtggatg gctcaaagga ttctcagatc 60
289 acacctcggg aggatcatgg gcaggagagc ctgttggcag ggctccacgg aacgcattcca 120
291 ccaaagacaa ggcagaaagt cactgccaa gccggaggcc ccggggatcc catgctttt 180
293 tcaagcccg agacagatga gaagctttt atatgtgcgc agtgtggcaa aaccttcaac 240
295 aatacctcca acctgagaac gcaccagcgg atccacactg gcgagaagcc ctacatgtgt 300
297 tccgagtgtg gcaagagttt ctccggagc tccaaaccgca tccggcacga ggcacatccac 360
299 ctggaaagana agcactctga 380
WJK
305 <210> SEQ ID NO: 4
307 <211> LENGTH: 126
309 <212> TYPE: PRT
311 <213> ORGANISM: Homo sapiens
315 <220> FEATURE:
317 <223> OTHER INFORMATION: Xaa at position 123 is any one of the twenty naturally
occurring amino
318 acids.
322 <400> SEQUENCE: 4
324 Ala Glu Glu Gly Glu Gly Ala Lys Pro Trp Arg Val Asp Gly Ser Lys
326 1 5 10 15
330 Asp Ser Gln Ile Thr Pro Arg Glu Asp His Gly Gln Glu Ser Leu Leu
332 20 25 30
336 Ala Gly Leu His Gly Thr His Pro Pro Lys Thr Arg Gln Lys Val Thr
338 35 40 45
342 Ala Gln Ala Gly Gly Pro Gly Asp Pro Met Leu Phe Ser Ser Pro Glu
344 50 55 60
348 Thr Asp Glu Lys Leu Phe Ile Cys Ala Gln Cys Gly Lys Thr Phe Asn
350 65 70 75 80
354 Asn Thr Ser Asn Leu Arg Thr His Gln Arg Ile His Thr Gly Glu Lys
356 85 90 95
360 Pro Tyr Met Cys Ser Glu Cys Gly Lys Ser Phe Ser Arg Ser Ser Asn
362 100 105 110
WJK
366 Arg Ile Arg His Glu Arg Ile His Leu Glu Xaa Lys His Ser
368 115 120 125
374 <210> SEQ ID NO: 5
376 <211> LENGTH: 678
378 <212> TYPE: DNA
380 <213> ORGANISM: Homo sapiens
384 <400> SEQUENCE: 5
386 atgtcgagac cccgaaagag gctggctggg acttctgggtt cagacaaggg actatcagga 60
388 aaacgcacca aaactgagaa ctcaggtgag gcattagcta aagtggagga ctccaaaccct 120
390 cagaagactt cagccactaa aaactgtttg aagaatctaa gcagccactg gctgatgaag 180
392 tcagagccag agagccgcct agagaaaggt gtagatgtga agttcagcat tgaggatctc 240

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/013,056

DATE: 01/09/2002
TIME: 08:24:10

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\01092002\J013056.raw

394 aaagcacagc ccaaacagac aacatgctgg gatgggttcc gtaactacca ggctcggAAC 300
 396 ttccttagag ccatgaagct gggagaagaa gccttcttcc accatagcaa ctgcaaAGAG 360
 398 ccaggcatcg caggactcat gaagatcgaa aaagaggctt acccagacca cacacagttt 420
 400 gagaaaaaaca atccccatTA tgaccatct agcaaAGAGG acaaccctaa gtggtccatg 480
 402 gtggatgtac agtttGTTcg gatgatgaaa cgTTTcattc ccctggctga gctcaaATCC 540
 404 tatcatcaag ctcacAAAGC tactggtgGC cccttaaaaa atatggttct cttcactcgc 600
 406 cagagattat caatccagcc cctgaccCAG gaagagtttG attttgtttt gagcctggag 660
 408 gaaaaggaac caagttaa 678
 414 <210> SEQ ID NO: 6
 416 <211> LENGTH: 225
 418 <212> TYPE: PRT
 420 <213> ORGANISM: Homo sapiens
 424 <400> SEQUENCE: 6
 426 Met Ser Arg Pro Arg Lys Arg Leu Ala Gly Thr Ser Gly Ser Asp Lys
 428 1 5 10 15
 432 Gly Leu Ser Gly Lys Arg Thr Lys Thr Glu Asn Ser Gly Glu Ala Leu
 434 20 25 30
 438 Ala Lys Val Glu Asp Ser Asn Pro Gln Lys Thr Ser Ala Thr Lys Asn
 440 35 40 45
 444 Cys Leu Lys Asn Leu Ser Ser His Trp Leu Met Lys Ser Glu Pro Glu
 446 50 55 60
 450 Ser Arg Leu Glu Lys Gly Val Asp Val Lys Phe Ser Ile Glu Asp Leu
 452 65 70 75 80
 456 Lys Ala Gln Pro Lys Gln Thr Thr Cys Trp Asp Gly Val Arg Asn Tyr
 458 85 90 95
 462 Gln Ala Arg Asn Phe Leu Arg Ala Met Lys Leu Gly Glu Glu Ala Phe
 464 100 105 110
 468 Phe Tyr His Ser Asn Cys Lys Glu Pro Gly Ile Ala Gly Leu Met Lys
 470 115 120 125
 474 Ile Val Lys Glu Ala Tyr Pro Asp His Thr Gln Phe Glu Lys Asn Asn
 476 130 135 140
 480 Pro His Tyr Asp Pro Ser Ser Lys Glu Asp Asn Pro Lys Trp Ser Met
 482 145 150 155 160
 486 Val Asp Val Gln Phe Val Arg Met Met Lys Arg Phe Ile Pro Leu Ala
 488 165 170 175
 492 Glu Leu Lys Ser Tyr His Gln Ala His Lys Ala Thr Gly Gly Pro Leu
 494 180 185 190
 498 Lys Asn Met Val Leu Phe Thr Arg Gln Arg Leu Ser Ile Gln Pro Leu
 500 195 200 205
 504 Thr Gln Glu Glu Phe Asp Phe Val Leu Ser Leu Glu Glu Lys Glu Pro
 506 210 215 220
 510 Ser
 512 225
 518 <210> SEQ ID NO: 7
 520 <211> LENGTH: 18
 522 <212> TYPE: DNA
 524 <213> ORGANISM: Artificial Sequence
 528 <220> FEATURE:
 530 <223> OTHER INFORMATION: Description of Artificial Sequence: primer TIP2c-s

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/013,056

DATE: 01/09/2002

TIME: 08:24:10

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01092002\J013056.raw

534 <400> SEQUENCE: 7
536 gaaacccaca ggaggcaa 18
542 <210> SEQ ID NO: 8
544 <211> LENGTH: 18
546 <212> TYPE: DNA
548 <213> ORGANISM: Artificial Sequence
552 <220> FEATURE:
554 <223> OTHER INFORMATION: Description of Artificial Sequence:primer TIP2b-r
558 <400> SEQUENCE: 8
560 ggtcatcatc gcagggtc 18
566 <210> SEQ ID NO: 9
568 <211> LENGTH: 33
570 <212> TYPE: DNA
572 <213> ORGANISM: Artificial Sequence
576 <220> FEATURE:
578 <223> OTHER INFORMATION: Description of Artificial Sequence:primer Hcthy-s
582 <400> SEQUENCE: 9
584 agcttgcggc cgcagatgtc gagaccccg aag 33
590 <210> SEQ ID NO: 10
592 <211> LENGTH: 40
594 <212> TYPE: DNA
596 <213> ORGANISM: Artificial Sequence
600 <220> FEATURE:
602 <223> OTHER INFORMATION: Description of Artificial Sequence:primer Hcthy-r
606 <400> SEQUENCE: 10
608 agcttgcggc cgcgaattct taacttggtt cctttcctc 40

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/013,056

DATE: 01/09/2002

TIME: 08:24:11

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01092002\J013056.raw

L:21 M:270 C: Current Application Number differs, Replaced Current Application Number
L:23 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:65 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:65 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
L:65 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:153 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:2
L:153 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:2
L:153 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:299 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3
L:299 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3
L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:366 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:366 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/013,056

DATE: 01/02/2002
TIME: 14:27:57

Input Set : A:\ES.txt
Output Set: N:\CRF3\01022002\J013056.raw

5 <110> APPLICANT: Ligensa, Tanja
7 Schumacher, Ralf
9 Weidner, Michael
13 <120> TITLE OF INVENTION: IGF-1 Receptor Interacting Proteins
17 <130> FILE REFERENCE: 09/453,195
C--> 21 <140> CURRENT APPLICATION NUMBER: US/10/013,056
C--> 23 <141> CURRENT FILING DATE: 2001-10-30
27 <150> PRIOR APPLICATION NUMBER: EPO 98122992.5
29 <151> PRIOR FILING DATE: 1998-12-03
33 <160> NUMBER OF SEQ ID NOS: 10
37 <170> SOFTWARE: PatentIn Ver. 2.1

Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

588 <210> SEQ ID NO: 10
590 <211> LENGTH: 40
592 <212> TYPE: DNA
594 <213> ORGANISM: Artificial Sequence
598 <220> FEATURE:
600 <223> OTHER INFORMATION: Description of Artificial Sequence: primer Hcthy-r
604 <400> SEQUENCE: 10
606 aqcttgcggc cgcgaaattct taacttgggtt cctttcctc
E--> 612 -6- 40

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/013,056

DATE: 01/02/2002
TIME: 14:27:58

Input Set : A:\ES.txt
Output Set: N:\CRF3\01022002\J013056.raw

L:21 M:270 C: Current Application Number differs, Replaced Current Application Number
L:23 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:65 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:65 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
L:65 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:152 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:2
L:152 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:2
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:298 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3
L:298 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3
L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:364 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:364 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:612 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:40 SEQ:10